773 224 411 Propitiatory sacrifices were offered on the wooden lamellae and the blood ran along the thong into the net. In addition, the hunter would saturate his weapon with the blood of wounded or killed animals to give his contrivance the victims' strength and to increase his own skill.

The ndõfere was used for a long time as a military weapon.

## Weaving

773 286 The invention of weaving is linked to the discovery of cotton cultivation. The latter appeared long before that of millet at a time when the only known tools were those of wood used to scratch /103/ the earth at the base of the wild grasses with which men nourished themselves (1).

[171] 1. See p. 154. The Dogon admit the same priority of weaving over cultivation of cereal grains. See M. Griaule. Dieu d'eau, pp. 31ff.

The myth mentions simultaneously the appearance of cotton and the invention of spindles and shuttle; it does not mention the loom which appeared later. The tale of the manufacture of the first clothing also includes details on dyeing which seems to have been known at a very early date.

When the men returned from the bush where they had been cultivating the norolã̃ sise (commonly known as cram-cram) and the narakata, a kind of couch grass which provided them with edible seeds, they would often abandon their wooden hoes at the crossroads in honor of the Soba spirit.

One day an old man who used to pass nearby was summoned by the spirit, saying: "To all of you who leave your hoes as you pass by, I wish to give something to hide your nakedness; but I will do it if you offer me a sacrifice."

The old man reported this incident to the men of his generation, who decided to sacrifice an albino at the crossroads. The spirit then told them to take the seed which they would find at the intersection of the roads and taught them how to sow and harvest it.

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"This," he said, "will be useful to you later as clothing." Men first made skirts of leaves and fibers which they used as loincloth. Then they sent their women to sing and give thanks to the spirit. When they had sown and harvested, they placed the cotton on the crossroads as a gesture of homage (1). The spirit then taught the wife of a farmer,

1. This custom is still observed today.

who used to come and greet him everyday at noon. One day she saw at the crossroads a bird whose name means "little bird who spins the cotton of God" (ala ka kwori parata kono ni). It held white fibers in its beak, pulled them out with its feet, and rolled the thread thus obtained around the body with its wings. "Watch the bird," said the spirit. "In this way he spins and weaves in the sky in order to protect his eggs. Cotton should be used in this way. Your death is near. Begin work from tomorrow on this little stick," he added, pointing to a spindle, "and teach the women of your family and the children."

The woman first spun awkwardly and went down to the river to show Faro her work and to ask for help. A fish came out of the water and gave her a spindle whorl in the shape of a ball, showed her how to adapt it to the spindle, and explained to her its use and divine origin. It announced to her that hereafter similar spindle whorl would fall from the sky with the rain for the women who spun cotton.

/104/ Having resumed her work with this new tool the woman was successful in it and taught her companions. They then threw their first threads into the Niger as an offering to the spirit so that the secret might not be lost. All artisans did the same with their first piece of work (2).

[182]

2. Every first piece of work is thrown into the river as an offering to Faro. It is a guarantee for the artisan that his skill will be retained and that his technique will improve. Actually the young spinners of Ségou throw their first spindle into the river. In addition, the parata bird which taught weaving is captured, its wings and feet are roasted, and the powder is given to whoever begins the appreticeship so that it may be over rapidly.

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286 Seventeen days after the apprenticeship the old woman died. Her companions continued to spin but since they did not work on wood (1), they had to ask the men to carve spindles, thus revealing

[412] 1. Except for cooking, a woman never uses a knife, an object reserved for men.

their secret.

Some time after this the spirit sent a spider to weave its web at the opening of one of the underground holes used for habitation (see Fig. 6), where lived a man called Bambou Diara. The latter watched the insect and they called in his friend, Kari Mariko. They wished to imitate the web by using the spider's thread which, however, proved too fragile to work with. They then asked the women for their cotton threads. Holding a twig of straw on which he had wound the thread, and having secured the warp, as had the insect, to the two rocks protecting the entrance, Bambou imitated the spider and made a kind of round fan, shaped like the web with coarse loops. When he had woven two, he joined them with a rope made of nyama bark, thus obtaining the first loincloth (mbogo nimba).

Kari Mariko had watched the work and had noticed the difficulty with which his friend threaded the woof through the warp. He got the idea of winding the thread on a thin stick more resistant than the straw and of placing this in a stone trough which would slide easily between the elements of the warp. This was the first shuttle (kuruni). He wound the thread on it in three bobbins, the symbol of masculinity, thus consecrating weaving as man's work. The threads were then stretched horizontally and the shuttle was used vertically, thus cutting across the warp each time it went up or down (Fig. 6).

All came to see the work of the two artisans and named the village where they lived the "village of intelligence, hakilidugu." They learned from them the art of weaving and today the names of the two friends are still invoked over the plate of food which each apprentice must eat before beginning his instruction.

Following the breaking of a taboo in the course of a fishing expedition on the river, the spindle whorls ceased to fall from the sky. Since then, fishermen /105/ produce them by mixing clay with karite oil and drying them in the sun.

773 286 [782] The loom was invented later. The positions of the warp and woof and the practice of breaks and knots were modified. The loom was formerly the object of nocturnal human sacrifices whereas the shuttle received lesser sacrifices in the day time (1).

1. At present, looms are set in the ground above a piece of pottery, the bottom of which is pierced before the pot is buried.

The stone on which women clean the cotton, kaba, represents the sky and recalls the divine origin of cotton and of the technology relating to it.

Clothing

291 Clothing which has intimate contact with the human body is a part of the person wearing it. On the other hand, the material of which it is made, and the various elements which compose it and which are associated with one or another aspect of Bambara metaphysics, exercise an influence on the wearer. The choice of clothing is rarely a matter of chance or individual taste and the various manifestations of social or religious life usually obligate people to wear appropriate clothing, the symbolism of which is linked to the action or circumstance under consideration. The role of the garment appears as early as infancy: a newborn wears around his loins a cotton thread, dyura dyuru, which is both a protection (for it "solidifies his spinal column") and a foreshadowing of what he will wear later. When he reaches the required age, a family reunion takes place on the day he is dressed for the first time. Before this, it is necessary for him to have dreamed of his first garment and to have talked to his mother of this dream; she then begins to spin the necessary cotton. Before dressing, the initiate proceeds with an ablution called mayadyi (literally, water of the person's action) in water taken from the Niger or from a pond of Faro's. The dressed child is told "that he is now a man and may become a member of the ndomo (2)"; then his kinsfolk tease

2. Society of the uncircumcised (see p. 222).

Kola nuts are much prized by the natives;
222 their caffeine content makes them a stimulant and energizer. The
[276] Bambara use seven kinds of kola nuts in their sacrificial and
282 divinatory rites: 1. Dangoro (red nut); 2. Geleworo (white nut);
287 Sosokuworo (a red nut pointed at one end); 4. Flaniworo (yellow kola); 5. Worodanda (kola without opening) which has no apparent cleft where it may be split open; 6. Bassiworo (a dark red, bitter nut); 7. Ryeworo (nut of light and indeterminate color). (This list is given us by G. Dieterlen in her Essai sur la religion Bambara [Essay on the Bambara Religion]).

252 To prepare kola nuts, they are placed in baskets of very coarse mesh lined with leaves that are moistened every four or five days.

245 Among cultivated trees, other than banana, mango, lemon, orange, pineapple trees [ananas, may be a kind of pine; the pineapple is not a tree fruit], etc., one must mention the Acacia albida, which plays a large role in Bambara mythology. In the dry season, it is used as fodder for cattle.

[32] C. Textile Crops

248 Side by side with these food crops, the Bambara cultivate textile plants which they use in addition to the wild textile plants. Among the principal ones, we shall point out the da (Hibiscus
[227 cannabinus) whose fibers are used by fishermen to make their nets.
286] It does not rot and is a possible rival of jute. The labor to exploit it, pulling up the stalks, retting, extraction of the fibers, is done in the dry season, when many hands are available. (1)

1. G. Spitz, L'Ouest africain français [The French West African]. [Ed., L'Ouest africain, A.O.F. et Togo; The West African, French West Africa and Togo.]

Cotton, which grows spontaneously in many places, is cultivated near the villages as an annual plant; it is a perennial plant which renews itself every four or five years. During the cultivation cycle, it is grown between millet and maize. The harvesting is
[286] done by women; it is picked out and spun by women, but it is woven

248 into narrow bands by weavers [men] who make clothes from it in.
286 unbleached, indigo-blue, yellow, or black fabrics. At the present time, after numerous attempts at improvement since the occupation, [654] seeds selected according to the zones of cultivation are distributed to the farmers, and the administration encourages industrial cotton cultivation in irrigated regions, as well as mechanical spinning and weaving.

248 Sisal is an agave of Mexican origin. The long, thick, pointed [177] leaves, after undergoing a series of industrial operations including mechanical extraction of the fibers, yields very strong textile fibers suitable for cordage, rope making, rug manufacture, canopies, etc.

Kapok (Eriodendron anfractuosum) until a few years ago was merely gathered, but now plantations have been created. The fruit is in the form of capsules containing seeds enveloped in a vegetal wadding. In one year the kapok tree can furnish 30 kilograms of fibers used in mattress-making, hat-making ...

## D. Agricultural Tools

241 Bambara farming tools are very simple. The hoe is almost the only agricultural instrument used. There are several kinds of hoe, particularly in the Bougouni region: the tyerengu, 0.50 meters wide, with a straight handle (chiefly used by the Sénoufo); the n'gu kala, 0.30 meters wide, with a curved handle. These two are used for digging, scraping, and banking. The flotton, from 0.10 to 0.20 meters wide and with a handle made from a forked branch, is used for the second dressing of the earth and for weeding. (When the weeds are too big, the weeding is done by hand). These hoes oblige the peasant to work stopped over. Let us also mention the axe, dyeli, which serves to cut shrubs and the branches of trees in clearing land, the machete, and a small pickaxe with a hoe handle, the yalo.

[33] Millet spikes are harvested with the aid of a special small knife to cut the stalk into pieces. Finally, the threshing of the ears is done with large bent sticks having round handles and flat ends.

[533] Agricultural labors, tillage and threshing, are undertaken [461] collectively following the cadence indicated by an instrumentalist. Work in the fields is generally done by starting at the bottom of a slope and working up, so the rain will wash off the weeds. The

438 643 [648] the gold. But they, in turn, could in no case resell the gold to anybody other than the Fama. Aside from certain sacrificial uses and the making of jewels for the Fama's wives, gold served to ransom captives or to negotiate royal alliances.

435 The price of the commodities was set by agreement between buyer and seller, except for cloth which had a fixed price, 100 cowrie shells per cubit in the Bamako region. As a matter of fact, the cotton [286] gathered in the fields of the community was woven by captives who were not paid.

426 686 Loans were made without interest. Interest, korko, is still forbidden today. Loans are guaranteed by labor. The debtor who could not repay his debt on time and whose family head refused to pay it for him was seized by the Fama and held as security until such time as he had reimbursed his debt.

804 Side by side with French units of measurement, the natives use their own for trade. Their measures of length: the cubit (elbow to tip of middle finger), the span, the foot, the length of both arms extended, the pace, the diare, and the kala . . . ; their measures of capacity: the sawel or moure, the mud; their weights: the moutkhal, the catal, the large and little karoni, the wakie, the pellet of tali, of tomi, of bagana, of gelen. Cotton is weighed on rough scales whose pointer is a wooden rod and the balances large gourds hung by strings. For weights, large rocks, kulu, from 800 to 1,200 grams are used. [436] Finally, the Bambara use French money almost exclusively: one franc of metropolitan France is equivalent to 0.50 francs C.F.A. Nevertheless, the use of cowrie shells is still frequent.

### d. Banks

453 One bank of issue exists in French West Africa: the Bank of French West Africa. There are also private banks, the number of which has increased during the past few years.

The Bank of French West Africa, which has a branch at Bamako, carries out the following operations: [43]

1. discounts notes or bills of two or several signatures due in not more than 180 days;

2. creates, negotiates, or buys drafts;

463 make tools, farming implements in current use, furnishings, orna-
326 mental objects, bracelets, different kinds of rings. They also work gold and silver to make jewelry in filigree.

462 Weaving and basket-making are not done by the people of
286 caste, but by all men, or, formerly, by their house captives.
285 Primitive looms, worked by treadles, are set up outside of the houses in the shade of the trees. The men weave long bands of cotton for making clothes, loin-cloths, and blankets. These bands, several meters long, are sometimes made into rolls weighing as much as 30 kilograms and are carried off to market by the diula [531] (itinerant merchants). The Bambara practice dyeing, batik, and embroidery (done by the men).

433 All this industry remains of strictly local interest and is directed solely toward meeting the immediate needs of the community.

c. Division of Labor

462 The Bambara are essentially an agricultural people. Never-
857 theless, as all members of the society must contribute a certain amount of work to the community, the nature of this work varies according to the social classes and according to whether a man, a woman, or a child is involved. The following tables indicate how the work is divided.

1. Distribution of tasks according to A. Aubert.

| Men | Women | Children | All |
|---|---|---|---|
| | Foodstuffs | | |
| | Preparation of food and dolo (beer) | | |
| | Sale of dolo | | |
| Preparation of hives, setting them, gathering the honey | Bottling and sale of honey | Helping | |

BA
773 tools and the throwing weapon were made. Then, unfired pottery and weaving were invented; and men finally came to know stone tools, iron and the forge. The technique of making dwellings seems to have developed more slowly.

a. Fishing

BA
Bo
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564 Side by side with populations who specialize in the art of fishing, such as the Bozo or the Somono caste, all the Bambara fish in the [96] rivers or watercourses in the neighborhood of their dwellings. A detailed study has been made by J. Daget (1). The Somono, who

1. Jacques Daget, "La pêche dans le delta central du Niger" [Fishing in the Central Delta of the Niger], Journal de la Société des Africanistes, Vol. XIX (1949), No. 1.

are the caste of Bambara fishermen, use traps and nets for fishing; the Bozo remain faithful rather to harpoons and small nets. They are
BA the ones who almost always make the pirogues, for they alone may
Bo enter in rapport with the spirit of the water, Faro. The nets are of
286 knotted mesh made with a weaver's shuttle, sia, and a cylindrical
227 mold, pako. The band of the net, as it is being made, is nearly always attached to a wooden bridge especially conceived for this purpose, the kale or dio soyo kala, a regular tetrahedron whose edges
BA are about 20 centimeters long, one of which is prolonged by a handle
Bo 1.50 meters long. The fisherman, seated on the ground, puts the
283 bridge before him, keeping the handle close to his leg. The fibers
824 used in netmaking are da (Hibiscus cannabinus), kie (Figna unguiculata), cotton, and now European thread.

Bo
226 The Bozo construct weirs from cut and joined tree branches; the weirs assume several different forms according to the regions and
Bo the snares used. Fish are used for human consumption; they are eaten
BA fresh, grilled, fried or boiled, or preserved by smoking or drying. Oil,
251 used for cooking and as a lubricant, is extracted from certain fish,
252 such as the tineni.

BA
226 Fishing in Bambara villages is done communally under the direction of a fishing chief at the time the waters recede. Precise rules of fishing rights and of rents due the masters of the waters are respected everywhere.

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831 the peasant digs with the male hoe and covers with the female hoe; the work done with the female double of the peasant and the male double of the wife symbolizes the sexual union. (1)

1. M. Griaule and G. Dieterlen, "L'agriculture des Bozo," [Bozo Agriculture] Journal des Africanistes [Ed., Journal de la Société des Africanistes, 1949.]

d. Basketry

285 Basketry is done by everyone, men and women; it plays a large part in the construction and furnishing of the house. Sometimes the lofts are immense baskets, woven on the diagonal. In certain regions a great mat is wrapped around the exterior wall of the round hut. The doors of mud huts are often coarse mats woven diagonally [531] which are placed before the opening. But much finer mats, made from fibers of different colors and with geometric designs with a symbolic meaning, cover the ground for sitting or sleeping.

e. Weaving, Clothes, Ornaments

291 The first article of clothing was the fiber skirt made from the [824] nyama (Bauhinia reticulata, or Bauhinia thonningii) and the covering for the sexual parts which are still worn during religious ceremonies.

[773] Mythology designates cotton as the first fiber to be woven.

●286 Weaving is one of the most widespread techniques. Cotton, spun by the women, is woven by the men, in olden times by the captives, who work in the open air near the huts, in the shade of trees in the courtyards or in the public places. A primitive loom made of four vertical wooden parts connected by horizontal shafts and driven by pedals weaves long bands. The warp and woof form a ground stich and symbolize a being of intelligence and eloquence. Moreover, a science of the bands exists which is based on the symbolism of colors, designs, and numbers.

822 The Bambara distinguish three fundamental colors: white, red, and black. Each of these three tints has its history and its role

822 in the rites. "Red is the color of the middle regions of the world. It characterizes dry heat; it is the color of anger and of justice, that of the king, center of the kingdom." Black or indigo (2) is

2. Zahan, Les couleurs chez les Bambara du Soudan français [Colors Among the Bambara of the French Sudan], Notes Africaines, 1951.

identified with the North and the [98] rainy season. It evokes impurity, obscurity. It denotes sadness and the end of labor. The South accords with the ancestors and the color white which represents light and purity; it is the color of Faro. The whole system
286 of bands woven from different colored threads according to various
802 designs translates the different conditions of the wearer, for each band has its own history, its definite use, and its cosmogonic correspondences. The study of this was begun by G. Dieterlen in Essai sur la religion bambara [Essay on Bambara Religion] and is being
291 pursued at the present time. Today the form of clothing varies according to the age and sex of the wearer. Young children are nude, with the loins girt with a cotton string or with a belt of blue beads or cowry shells. Sometimes, two small copper bells attract the protection of Faro by their sound. Up until their marriage, the young girls wear a loincloth passed between their legs and held in place by eight bead belts. When they are married, women wear the loincloth open, attached at the waist, and a cotton handkerchief covers
[854] their hair. When a child is born, another cloth knotted at the chest holds the infant astraddle on the mother's back A chief's wife
[554] wore a piece of material made of seven bands which she threw over her shoulder. Very young boys wear short drawers whose form varies with the age classes. Later they are dressed in a short tunic with a neck opening cut out and fitted sleeves, and in ample short breeches
[801] formed of three bands (the masculine number), passing between the legs and three bands on each side covering the thighs. The waist is also encircled by four times three bands, numbers of femininity and of masculinity. Over their clothes, men and women wear a large cloak with an opening cut out in the middle for the head and whose ends are sown together, leaving large openings on each side. These cloaks have a large pocket in front and are embroidered with symbolic